

EDUCATION AND ECONOMIC DEVELOPMENT

My topic is "Education and Economic Development" and basically, I am going to talk about the first part, for about ten to fifteen minutes on "Education As a Concept - What Do I Mean". And maybe later on you can ask me about your understanding of the word "Education", the term "Economic Development" so at least we are on the same wave length and then I will go into a little bit of philosophy and logic and hope we will not get too lost. Then we will discuss what I have called "The way". Those of you who are Muslims will know all about the correct ways ... i.e. the proper road to learning that is the roots of education, let us say, and then we will look at some byways. I hope to wrap it up in about sixty minutes or so from now. Then I will answer questions so that we have a rough idea. In the midst of all these, I got my ... the transfer itself. Here we are, I hope you can see it but if you can't see it, it is a kind of impressionistic thing. The British Minister of Education keeps churning pictures. There is an octopus and you would see that he has got one of these here too, his octopus' arms are stretching, struggling. Assume that is a student looking like a monkey and exam paper and books and so on. He looks rather irritated and the title is "Keith takes a Grip". This is a very recent issue of the London Economist. It gives you some idea on what we could mean by education. Our discussion on the relationship between education ... I will stop playing with these tapes in a minute. Now, here you see education and economic development and I have just put in some letters taken at random really, ABC and XYZ. You should be thinking along rather unfamiliar perhaps, for you to philosophicalize that policy is your business and implementation is very much my business in higher education. These are the three areas that we have to look at the relationship between these two subjects. If you put them into a nice diagram you get your ABC and XYZ and you will see AA ... influences X and Y and B and so on. This is really the essence of what I am trying to get at in today's thinking. In education nothing happens in isolation. It is exactly the same in Money and Banking. The only



difference is between your currency and my currency. We are dealing in education with human minds and abstracts and sometimes concrete things called certificates and diplomas. But essentially, we are managing them by shuttling them around and we are subject to the philosophy of the institution of the kind of economic development which we will get to it in a minute. Then you have government policies, University policies, administrative education policies and so on. You may have the most marvellous policies, then finally you can come to the question of implementation. What you want to do and what really happens can be quite different things and sometimes people make statements, make decisions, make policies without realizing the particular philosophy that they are adopting and you can have at very sophisticated level a contradiction between your education philosophy and your economic development philosophy. Harmonization of all these is really a great art. This is a single lecture and not the one year course on economic development, I cannot introduce you to the finer points of how to do these things. As if you are a bird flying outside, give you a glimpse of how the machine works inside, according to one man's view. In the ideal life situation, have you got the rack, I used to have it .. sort of thing, otherwise I shall just carry this with my hand. Any ideal situation, the philosophy defines the situation within which the policy is taken. This is clear if the word 'policy' is clear and the resources are adequate. You know, you can have a marvellous policy and it turns out that you have not got the resources. You want to computerize education, you just got two Apple in the whole place. Well you will not going to be able to seriously do it and I remind you about this contradiction because it happens very much. Those of you who have evenings to spare, will see the series which was one episode last, indeed related to education, I almost fainted. The "Yes Minister" series - British Television and Minister has his philosophy and his policy and the civil servants tries to screw him up and by playing around with implementation and resources so this is the coordination, the planning and of course education is in competition in real life with other Ministries, with Health, with rich buildings, with roads and with



all sorts of thing. For quotation, if you want to write it down, one of the curses of the whole thing is too much tinkering by half-baked minds. Piece meal tinkering by half baked minds is one of the curses of third world countries. You can always quote that back. I am sure in central banking the same thing happens. Now we can get down into education. What do I mean, well it is quite simple. If you take an official chart like that, you have the age there from six years old when they go to school until they enter University in 19 or 20, graduates with Ph.Ds at 27. People go to primary schools, lower secondary and upper secondary and prepare for Universities, horizontally without sending off into teacher training or technical education. That really, is education system. You can have a concrete chart relating to the number of years. In different countries, of course, this varies. Six years in primary and then two plus or three plus two plus two to get into the University. University could be anything, three, four, five depending on the course you are attending and then postgraduate education. That is system. But education is of course much more than just a way of filling in the years. As the child goes into adulthood, you can ask horrible questions and the questions can be made increasingly horrible such as why should you be educated at all. You know, maybe as students of economic development, you could say that if you are not educated, you could not have economic development. There are all sorts of clever people who can analyse this statistically, work out the profitability of different stages of this education investment, in primary education has made a yield for economic development and investment in University education. University lecturers and students continually criticize the Government and irritate them. The Government feels that it really is a very poor investment. Primary school children never demonstrate. They are those sort of views of education too. We can ask these questions as we go along the different stages.

Please bear in mind what I am going to talk about is not pre primary kindergarten. I am going to talk about primary education



and secondary in quite a broad context. And then, we get into higher education and tertiary education i.e. including postgraduate education. As I said just now, I used the word "By ways". This is the main way. Primary education, leading right up to University. That is the main road. But then there are side roads, which we will look out, which is life long education and education at a distance i.e. using TV, the Open University type and so on. In order to structure my talk, we will try to see the relationship between each of these stages of education and economic development. That should pass the time. Since I wrote this paper, Dr. Vinyu and Dr. Zeti Aziz persuaded me. In a moment of weakness I think I decided that I would do it on the ground that it should discipline my thinking for a little while. I started asking very awkward questions and I went to the people who are planning our national education. I said why you must answer this to yourself or to your country. Why should you have primary education at all? Is the object of primary education to keep naughty children away from the home? Or is it to make them mildly literate or you do it because everybody else does it or do you do it because if you don't go through primary stage, you may not reach the University. Every country wants some people. Why should you have primary education? This is a very interesting question and if you can be a little specific about it, of course then it would help.

In a country like ours, when we come to the concept of poverty, this will be more relevant here. In a country like ours, the socializing function of primary education must be quite important. That is getting people from various races to be together and to understand each other and to appreciate the fact that there are some people who have different languages but will develop a common language and learn together. Citizenship, laying down a foundation at least of race, ritual making. We have very big education reform going on now which is entering its second year and that is what we call KBSR which in the old-fashioned thing was 3R. KBSR is in Malay and 3R that is really. We found after many years that people graduated from ...



My goodness, here comes the music! We found that people were leaving primary schools and unable to read newspaper and they were actually joining adult education classes to get literacy. So it seems a bit ridiculous and this worries a lot of people. Also, there was a problem of people who dropped out and because it was not very interesting and because it was not very useful, education for six years for many people the difference between going to primary schools and not going was you didn't stay at home, you went to school, the books and the exercises and all sorts of things. It was very old fashioned in a very splendidly Asian way i.e. all the children are placed and the teacher told them something and they repeated and they memorized it. They did not worry too much either and they were all in one big open room sitting there and in some cases they had one big exercise book because they were very poor and everything was written. Arithmetic, composition and so on. So this has changed now and they have a lot of activities and specifically they are learning to read and write and count which will greatly help us when they come to the Universities because certainly it is very clear that many of them don't know how to write, literally write, just hear calligraphy is unreasonable and so we hope nationally that as a result of six years of primary education, these children will have literacy and numeracy. Also, in some countries and sometimes here I want to mention this because it is related to economic development. People hope that children should go to primary schools and maybe during the time they are in the primary school, you can remedy some of the more apparent physical defects caused by a part of the poverty syndrome such as their physical systems have been having worms, about one Prime Minister or two Prime Minister's ago. I am not very popular about talking about worms. Because there are always anti government worms and if I could find some programme on worms - actually there are programme on worms and in Europe they are producing programme on worms which they will export to Japan to be made into hamburgers. So if you want to know more about this, I will give you the references but here, most of our worms are anti government worms and we have done in the University great surveys and lot of reports showing that



primary school children systems particularly their stomachs forty to fifty percent will have one variety, thirty percent maybe two varieties in certain places maybe you can find three varieties. Now, if you walk around your earlier life history, with three varieties of worms, sharing your meagre diet and also dumping of their waste material into your system, poisoning your body you are not really going to be very bright. And if you find them, the health rate or the worm rate among rural children is higher than urban children and much higher than many parts of federal people who have worms of low rate. Then of course, you are laying down the foundations of inequality in performance, just simply that. So rather than spending your millions on building great bridges and highways, deworming campaigns could be more effective in rural development or even in development. It does have a very unpopular idea. People talk about it. And the medical school did a lot of research on it. It is not that we do not know. We do not need any more reports. We do not need any more studies. WHO bloated to the most with materials and so on. Our Universities in this region but no economist in fact, now that I think of this has written a comparative study putting in a million dollars into the deworming campaigns in primary schools as a quarter of a million dollars in an aerobus system in the city. These are the kind of exercises which economic planners could do. According to me, if you want to see the relationship between, because why, and many reports will tell you is halt in early years. By the time a child is six year now, pre primary education, the size of the brain and co-cells and the wiring inside her practically all watching her now in this room in your head is really more or less what you had when you were six or seven or eight, you reached 90 percent by that age. So if you suffer from any kind of malnutrition, protein deficiency or anything invades your body, damages your brain, it is really according to the experts, irreparable and no amount of school feeding schemes and all sorts of other things can improve. Maybe in the early primary or pre primary years, there is a time besides promoting citizenship to take care of some of these deficiencies. Well, let us move on from the primary to the secondary.



After the primary, according to statistics that we have been able to get hold of here in Malaysia, for instance, the early part of primary quite a lot of people go on. This is the primary level, the six years we have been talking about. Then they take an examination and it is in our country here which has automatic promotion, going into the secondary, and the real cut off here in the middle between the lower secondary and the upper secondary. What I want to give you some idea of the lower secondary and why people should have secondary education. I got my, here we are, if you want figures ... put this on again. In Malaysia in the primary level, is about one hundred percent unbelievably. Later on we will look at it rather closely. We have discovered from the Census Report, there are people in the primary age groups who have reported they had no schooling, whatever that means, in Malaysian English. So then, people who are in these age groups but who are not in school or who are here or here who are illiterate, you can have two indications in the Census, you can ask them and check up on this. They could have been to the primary school and be illiterate too. We think it is very close for all practical purposes to one hundred percent in primary it is not compulsory but everybody seems to take advantage when you get to 2 here. It is ninety percent. There is some significant dropout for economic reasons and then when you get to 3 the upper secondary, this line here pretty heavy exam and that exam which is mostly multiple choice. It is essential to pass that to be a sweeper in the University so most people try to take it but fifty percent don't proceed. So fifty percent are of the age group and in L3 and ten percent are in L4 and in the Universities. If you add up the whole thing including overseas students, very broad percentages about six percent of our population are in higher education. Six percent of the age group are in. I worked out these figures before the selectors so I hope they are right but this gives you some idea. Now why people should go into secondary education. We are now into the business of learning something. Some kind of skill and then we can ask questions about relevance of those girls and also preparation to be a sweeper in the University of Malaya, you pass the exam, otherwise you



can't get a job. You pass this exam within two and three and then you pass another exam here between 3 and 4. This is the big end of secondary, what is called Malaysian Certificate of Education, SPM, and this entitles you to enter all sorts of interesting government jobs clerks, stenos, and so on and then from 4 you are really into preparing yourself to get into the University. So this really is related to this side. This is the real cut-off and during this time hopefully, you are picking up all sorts of skills. And what does secondary education do to a young person. Well, we hope it gives motivation into it, keeps them away although there is an increasing problem with us from drug addiction to the fact that they are collected in the schools, they live in the hospitals. Sometimes, opens a market for drug pushers and even with our death sentence and deterrence, it is quite a problem. It teaches, we think a certain amount of knowledge like what volcanoes do, creativity, thinking and memory. This is also going to be reformed very considerably in the next few years.

By the way, before we leave this general picture of education, in Malaysia the male/female balance is pretty good all the way up but the ladies seem to be loosing out as you go up the scale where it might be fifty:fifty neglecting the population here. Then ladies go down 49, 48, 45 and then by the time you get to the Universities like University of Malaya, it is roughly 33-34 percent. Different racial groups have slight differences, which is about a third (1/3) which is still pretty good. I hope the University population are ladies.

Now I think at this point, I will change gears and look at economic development and then we pull education and economic development together in a minute. Well I started very early in the economic development game in the fifties and I was always puzzled, what was economic development, although I passed exams religiously and I became more interested actually in rural development, which is one part of economic development. Economic development includes industrialization and many other things and modernization that for a long time, I talked about what are the



real problems of the farmers in our region. Certainly, rural people are numerically in most places except Singapore, the most important centre. I came to the conclusion that it was really poverty and rural poverty and therefore it was quite simple to define rural poverty as the process and reduce and ultimately eliminates poverty. Sometime, some ten years after I had these ideas, we had some rather nasty wraps who can read books and including those that are banned about the May 13, 1969 instance which really changed the whole course of Malaysian economic history and political history as well. Because out of those wraps came the policy known as the New Economic Policy (NEP). Now, recently we see the newspapers there is the NAP, which means that the Agriculture Ministry was sleeping for twenty years that now they come out, that they have the national agriculture policy but then we had in 1971/72 the New Economic Policy. You want to understand Malaysia, you must absolutely memorize the New Economic Policy which is very very easy to remember because it consists of two so-called parts, one part is the elimination of poverty irrespective of race, the other part is restructuring society so that they will no longer be an identification or close identification of race with racial groups with economic functions. But the Chinese dialect group known as the Heng Wah people are rather rare. They have a three in one religion. Now they really dominate the motor car spare parts business in this country and so we think this is not a very good idea. We think we should study too and produce and persuade the wholesalers and the agencies importing this so that they should be some Malays and some Indians involved in spare parts. This is one example. When I started look at this in the late fifties, I was one of the first people. There had been studies of this in Thailand and in Indonesia besides Malaysia. There is a strong tendency for various reasons for particular racial clan dialect language groups or even sometimes religious groups to be identified with a particular sector of the economy. This is all very fine if everybody is very happy. But if some people feel some sectors are more lucrative than others, better income, then they feel that they should share the goodies of life and so we hope by 1990 to restructure



economic development in Malaysia means these two things, eliminating or reducing poverty without worrying about whose poverty it is - Chinese poverty, Indian poverty or Malay poverty and restructuring society. So first those are the two prongs. To get into education because education is a major instrument. I mean you could have Fidel Castro or Mr. McGabe or somebody like that or even Idi Amin in his own way. He can restructure society too in one way or another. Tribalism is a very great problem in Africa. They restructure or they do not restructure their economies. They put Generals in charge and they have an illusion that they are having economic development but in this part of the world in Thailand or Indonesia or Malaysia, there is continued process of trying to share out the advantages, say sources of economic resources, the parts that give people better income so that everybody gets a share of the good things of life. Because you get to Universities, this becomes very critical. Primary education, everybody has it, not much of a problem. Secondary, is also open to everybody. Dropout rates are more or less the same for different racial groups. But in the good old days before the seventies in the University, you will get ... and in those days this is now just changing in the last five years but in those days - Medicine, if you become a Doctor you become very rich and become a highly respected person. Must be the same in many of your countries so people want to get into the Faculty of Medicine and you would find that the Faculty of Medicine cleaned off from the Upper Six level here you might get all this C coming in here of all these people. You might get, let's say, 1,400 qualified applicants for 120 places. These are almost exact figures in the Faculty of Medicine. Now you could get perhaps in those 1,400 or thousand of applicants, five or ten Malays should arrive at the bottom of the qualified applicants and they would take by year of merit the top 120 will be very brilliant people getting 3As and so on in the upper secondary leaving examination the A level HSC. And so, if you look at the Faculty you find the indigenous people so-called Bumiputra, Malays in Malaysia were actually no Malays. The Malays say this is terrible discrimination. Old teachers are either expatriates or non-Malays and there are no Malay students. They must



have some wicked scheme to exclude us, so how shall we solve the problem. Well, one way is to burn down the Faculty and some of the ideas of people in 1969, 13 May was precisely that so other people said no. So, what we will do then is to change the admission system. The University of Malaya - we have changed and we have deliberately set up an institution of our own. This is remedying poverty very directly. To go into here, we go right through the whole country to the very remote backward rural schools who has students in this area or has students in this level, actually from here, and we give to each school, we say, we will take the best students in this school one at the most two and we will bring them to the University of Malaya and we have a pre Faculty institution which is called Centre for Foundation Studies in Science and we put them there for two years and we teach them Mathematics and Biology and English. Now they are very poor and sometimes we teach them Malay as well. Generally, their education has not been a very good one. And at the end of the two years, we put them into the Medical Faculty and then I have to bring some dry-cleaning agents and detergents of various kinds to clean up the brains of the medical professors and lecturers. So far for restructuring society. Because they are used to teaching brilliant people like yourselves, they are not used to teaching rather poorly educated people which requires a totally different technique. Eventually, these people can catch up and the first batch are graduating now. But we have more problem people now who say I am not school masters and I was brought here to teach the best people in the country, the elites, the children of people who already have two cars and can afford to have five tutors and so on and who can afford to own a flat in London and who is studying here as a kindly gesture or they like to keep their children at home. That kind of situation. Final year medical students, you can see hardly two kilometres as the crowd flies from here in the car park of their hostels are all full of cars. I take visitors and show them somebody washing cars. I say, in America, students earn money washing cars. In Malaysia, I said, students pay people to wash their cars. These are medical students, not Economics students, not our students. These are Medical students who came from affluent families. Now



if we are going to restructure society, we are now into more than policy, we are into philosophy. If our philosophy is to restructure society, we want to see fifty percent of the Doctors, fifty percent of the Engineers, fifty percent of the Economists, are from the Malay people because they are fifty percent of the total population. Why should they be denied this education and why are they excluded simply because they got more worms, they got lousy schools and so on. Eventually, we say we will put that right but now we want University thing to be right so the University has to have many policies without lowering standards. Big question - how to do it without lowering standards? Because we have external examiners and we have assessors, our students who graduate from here and take higher degrees in Europe and America. This is the big question of the relationship between economic development and education and the poverty issue. What causes this poverty is the next question that we have to get fairly clear in our minds. I have written about it and one time used to be popular A Levels examination question. Then there are other theories. There is a big debate going on now in Malaysia among economists and all this weirdo sociologists are trying to bring in their own idea but to me it is very simple. Poverty, be it rural or urban is caused by three factors i.e. low productivity exploitation and neglect. We take the 'neglect'. I mentioned just now you go to an urban school and you see the Library is full of books. You walk to the laboratory, there are lots of microscopes, all of which are working. You go to rural school and there is one microscope and if that breaks down, it has to be sent by officials of the Ministry of Education, if they are in the North, say to Penang and for six months, it does not come back, so no microscope. We discovered in the University, people come in to the Science Faculty, they have done one dissection in their time and after the secondary and people in the urban schools, private schools in the city, they have done one dissection a week. You put these people together in the class and the farmer's son or daughter fails, and you say "there you are, the farmers are stupid. Their families are stupid".



It is not that they are stupid, they have not had the opportunity. So we have to rectify these opportunities. In this rectification of opportunities, shifting budgets, buying books for libraries, textbooks for the rural areas is as important as buying books for the urban area, shifting manpower. All the bright teachers, University graduates, they do not want to work in the rural schools. As soon as they get a transfer, they resign or they go to see some big shot in the Ministry to wangle so that they are not transferred, and that kind of thing goes on all the time. While they are students, they are fighting for human rights and the farmer demonstration and so on. You can see our newspapers especially the ones overseas but you wait till they get a job, then the first thing they want to know is how soon can they get the car loan and then the next thing is how to avoid being transferred into nowhere where people really need them. They don't want to go if they are teachers, so then they try to get jobs into the Universities, in the old days so as not to get transferred but now Universities also have branches all over the place, so this is not so popular. That is neglect.

Now exploitation happens, if our system because of various monopolistic/monopsonistic possibilities. I merely say to you that the people who buy their rural produce very often get themselves into a monopsonistic position. The people who sell, I am also very active with the schools cooperative movement. People sell - I saw in the papers the other day, it is quite recent in spite of our activities, a pencil, a ball point for thirty cents when they should be selling it for twenty cents. And they sell it for thirty cents because they are the only shop in the village that has ball-points. Or that they are in a league with the teacher giving him a cut back and he buys and sells to the student at thirty cents. Now, the school cooperative goes in and opens up a shop and comes out at twenty cents and still makes a profit and the price will come down. That is exploitation and that goes on both ways. That is no wonder people don't have enough. Low productivity of course is the one that, I am sure is the one that you will get big doses of in this course and and it also is related very much to the newly announced New Agricultural Policy



and so on at FAO and every other international agency with great respect to the World Bank, which does not do this so much perhaps. Will tell you about the Green Revolution and tractors and fertilizers and weedicides and so on. Modernization of fishing agriculture and that will bring you a great income. It can also bring great indebtedness. It can also restructure the rural economy negatively. On the other hand, if it is combined with some kind of reforms that break the monopolistic and monopsonistic structures, then of course you can really improve rural incomes, but we have not been very successful in Malaysia in improving rural incomes. We have been very successful in shifting rural people up. Over a hundred thousand farmers' daughters have gone to work in electronic factories and their income is much better. Forty to fifty thousand people have gone on to settlements in Malaysia and presumably in Indonesia and presumably in Thailand which I don't know much about but this is done in chance migration. Their conditions became much better but they represent less than ten percent. In some countries less than five percent of the rural population who need land or who have small pieces of land, so the big problem remains to be tackled. That is it. These are the main areas of course of poverty and of course the low productivity is greatly influenced by the poor health of the rural people and they meet with diseases of various kinds and really you have to be in the system and closely associated with the University Hospital, which is also next door, and people have to come to us from the whole country. People have to come to us from all over the country because we have all sorts of gadgets and people who can treat all these diseases. But if you go into the rural areas where our graduates are running the show, it is not a place to be ill especially for the didactic disease. You can see that some of our VIPs don't even trust us. They have to go to London or America to be sure but even then they die. There is the great Rectifier in the sky. His word is final. But this is a very big aspect of the relationship between education economic development. What about the Universities. We have looked at this up the scale and now we can come to the University level. This one of course is the most written about. There are more seminars on Universities in Southeast Asia.



There are many regional institutions. There is RIHED, there is ASAIHL University clubs and there are various other organizations that will bring together University Professors, Lecturers and Vice-Chancellors and discuss higher education reform and higher education, higher education economic development, higher education in culture. You can read all these in some of the papers that are written for these seminars. But basically, the University is there to provide the people who will do the planning of the Central Banks and the Economists and to manage their resources and to provide the professional people and so on. And that is why the Universities are there, teaching. They are also to carry out research, otherwise they are just polytechnics. Many of the Universities I think are starved of money. They are not given enough money. The Government will pay large sums to foreign experts to come and be Consultant, do a study for them and open up all their files and everything for them to see but when some local Universities chaps, who of course might go bad and become a critic of the Government, suddenly the Government feels a bit nervous about using him. In Malaysia this is changing. I think in Indonesia, I get the impression that it is also changing. Somewhat, the Government is using more of their local people as Consultants but Universities should be encouraged because the function of the University is not only to transmit knowledge between generations, older people teaching young people but is also to enrich knowledge and that knowledge - while there are certain universal theories of economics, money and banking, application of these theories locally requires experience. And this, the tank, the great pool is the University. Universities must have money to carry out this kind of research in order to do the thinking and decent libraries and the equipment and so on and this is a very difficult thing. Then Universities nowadays - people can't wait for people to graduate so they feel they have to go out and fight for the pheasants. If you look at countries like India and I have to say even Pakistan because they are much tougher there, the students are spending more time outside the lecture theatres than inside and fighting for every kind of injustice, except to themselves, denying themselves any education and so their system will tend to go down



Those of you who are familiar, I am sure all of you are familiar with Grecian's Law in money, that bad money drives out good - this applies to Universities. Bad students drive out good staff and bad staff drive out good staff faster still. So you go into a spiral downwards and the quality of University life goes down and to take the Indian example, many of the Indian Professors are holding Chairs in Cambridge. Very good people, absolutely outstanding, I am sure many of you know their names. Why aren't they at home because the conditions are so awful. They can't get on with the business of scholarship, also the income is much better. Now one of the devices that India has tried and double checked, you cannot work in Chicago but take a Chair sometime in the year, please come here and do something. At least get some parts of their brain knocked down the drain so this is one of the device. Fortunately in Malaysia, this is not yet a serious problem although newspapers and magazines like to picture but we are draining off into the private sector because the gap in income is becoming bigger, than is tolerable. So we tend to lose people. Now I put together some of these ideas that I have been talking in a diagrammatic form which is a bit more elaborate. I made it at 5 o'clock this morning from several other models. It sums up but I have not been able to put it for you. Later on I will explain what that logo is all about. Actually, if you will look at it very carefully, you will solve it. It is a mixture of the I'Ching hexagram. Economic development, New Economic Policy, these two little things, hope you will remember it. The educational level I have been talking about, Level 1, 2, 3, 4, 5, 6, 7 this is University and this is learning at a distance and life-long learning, I will come to it in a minute. Improving productivity, reducing exploitation, remedying neglect, these are the three major areas, area 1, 2, 3 of economic development. I sort it out under Level 1 Primary Education. You might have numeracy and literacy which will reduce exploitation and improve productivity and you can have reform which we have KBSR reducing the imbalance of facilities, libraries and laboratories, textbook loans, scholarships, admission system and redistribution of manpower. Then the middle level, secondary education, blue collar workers, and white collar workers in the higher part of secondary



will induce productivity and we will come to this in a minute. Reducing exploitation - if you can have increasing sophistication in your programme, you can teach the students about bookkeeping and other things and they will understand this better. Useful skills from the TEC Technical and TECH Technology. I love to do this sort of thing. It drives my students nuts. I should really give you printed things in colour. It really means at the lower level you just learn to handle tools and files and blades and so on. Once you get into this, you are in the radio-repair, TV repair and installation of electrical systems and then going on to higher technology which is what Singapore would like to do. This is secondary technical education and then leading into the middle of tertiary secondary area, polytechnics, technical institutes and so on. There is your University. This prepares you to go into the University and higher education research, dissemination, consultation and remedying neglect which I have explained to you. That diagram, in a sense, sums up what I want to talk about. As time appears to be running out, I will mention very briefly the topic which is relevant because in our Census, you must have this in your countries is the no-schooling people. I called them the people, if that was the way of education. Then these are the people who are out of the way. They did not get on the way, they did not get on the road, they got off the road too soon. Where do we find and how are they distributed. In Malaysia, it is now two-third of the population in our last 1980 Census had some form of schooling. They had some form of education. But still is quite sizeable, people who did not go to school. You can look at the various age groups. You can compare rural/urban, you can compare male/female and as you will expect reflecting these neglect question. The proportion of young persons, very young 6-11, and who had had no schooling among the rural population is slightly higher. Only slightly but perceptibly higher than the urban. If nothing else, it tells you the figures must be right. So it must be right. You can study this for your own country.

As we enter the home stretch of the marathon, I will take a look at some of the other thing which I think are important.



in the relationship between education and economic development, one is what I call LAD, learning adjectives, otherwise to you "Open University". The best example for this part of the world and you have to ask your colleague who is from Thailand, there is one coming and supervise Thama Sirat University which teaches television and radio. I think from what I have learnt and seen, this is perhaps the best model. People tend to go to Britain because the Open University is very famous. It is the best in the world from the world point of view. They can give and export to America but in terms of this region, I think the Thais have it. I can say not because Dr. Vinyu is here. It is my personal evaluation that you enable the population to learn. You can adjust your programme. You can teach people TV repair, you can teach them Accounting, you can teach them just how to appreciate literature, almost any subject but you have got to prepare the material so that it is relevant and interesting. We have the media. Almost all countries in the region have television. Indonesia has at least one television network and another one next time. And as you know the American lost one of the satellites. It just proves everybody can make mistakes now and then. Even without satellites, the TV is there that it should take. I do not like to tie other countries, take your own. How much time of our studies - television with two channels, very soon, it would become three channels is taken up at the bottom by black middle class people in New York or white people who have problems with butlers or maids and so on or some stupid old Jerry Lewis movies which are not classics in any sense of the word. What are we doing pouring these into our population. We have these facilities. We have excellent postal system. We have reasonable good telephone system. Soon we have excellent printing facilities. Each one of us our countries could have a reasonably efficient learning at a distance system but we do not have it. In the case of Malaysia, there have been no press here, I can say. We have not one University in recent times, we have two, one international and one up in the north. I say as much to this. I am very sensitive to this because everytime they build one of these things, they pinched some of my people or they reduce our budget. I am very sensitive and I say so to various people



but there are other reasons for making these decisions but if we put the same amount of money in distance teaching, I think we could do much more. In our countries, we already had seen the charts, rural development is important. If you have 1 million farm boys and girls, there must be among them some very bright ones who because of family reasons, because of the school is not very good one, they just don't make it to the University. If you could offer that distance learning, many of them could prepare themselves and work themselves all the way up and you can generally modernize your population much faster by offering this distance learning. You told your country that nowadays, it is a model for many .. You know we have our "Look East Policy" here. I myself, a graduate of Japanese University for part of my education, The Japanese have two full time chores, that means from about 4 a.m. in the morning until 2 a.m. , two channels teaching German, Mathematics. You name it they have got it full time and master minds of teaching in addition to very expensive formal education system. And most advanced countries have something like this, so why should we wait. Thailand is not waiting. They have this very excellent system. Ask your Thai friends how they work. I think this is one of the great contributions in this part of the world that education can make through distance learning. And then there is the Unesco report which is lost and this is why Unesco is getting the Americans very irritated running away from them. They introduced report like this which is very splendid, which is called "Learning to Be". Because they could not translate the original version which was written by a former French Minister of Education called, and he used in French the term "Education Prominon" and that does not translate very well so some wise guy has English version "Learning to Be". And when you have a lousy title like that people get suspicious but actually it deals with life-long learning. If you ever have the time, read this book. They have international commission of brilliant people from many sectors of knowledge and they wrote this report on how people should be educated all through their life, for a better life for greater productivity, for more satisfaction and for resources to be better used. I think it is full of very practical suggestions. And one of the papers is my list of papers



that are offered to you to read. I evaluate this for I have been asked by the Joint Advisory Committee of ILO, FAO, WHO and Unesco to evaluate this report from the point of view of rural development and I did so. Then I said, we had a number of seminars. We had a national seminar here. We translated this into the Malay language. But now these are the reports that come out at the rate of about three or four a year people get snowed under so you don't know which one is worth reading and which one is not worth reading. So it gets lost but this one takes up discussion that you can learn and people can be motivated to learn all through their lives so that you can deal with the problems of poverty and economic development. So I leave them that to you and I suppose I should say a few words of propaganda. I was a great propagandist some six or seven years ago from the Asean University, nearly six years ago, University of Southeast Asia Southeast Asia, kind of shot into Asean and then Asean although it is growing, I sometimes think it is also shrinking and it will be something else later on. We need a University of Southeast Asia or University Asean in order to Aseanize knowledge, and we can train people like all of you from the Asean countries. They get to know other and they see problems from a global Asean point of view. And they can then understand what the two priorities for Asean should be as compared to South Asia, West Asia, East Asia. Other people have other problems. They all seem to be international scholars and so on in different way. Nobody is entitled to look at us except ourselves. I think there is a need for some kind of higher institutions that bring people together just as we are brought together from everything, irrigation engineers to professors of history and and let them study something. Not a big star in a way, you find that SEACEN is a model on that. Something like that for the region, filling our scholarship and having high standards of excellence. Some years ago the great Asean leaders, said they would set up a network of Universities. Our countries nominates one but when they got down to it, as I said, the passing philosophy policy might be good but no implementation right up to now. So this is one of the thing yet to be done. The people in the region who write about this



address papers at seminars and make my propaganda poem. I do not mind because I assume all these good ideas would take years of time ten years, fifty years or maybe one hundred years. It takes one month to push the idea. Some of the great revolutionaries had their ideas but did not see much in their lifetime. I have seen quite a few of my ideas being implemented in my lifetime so I should be grateful but this Asean University is one idea that I would like to see implemented. Just a few quick words so that you can ask questions. I realize I have gone over time a bit. You may want to ask me some questions on what I call the supply and demand paradox. My colleagues have written papers from the University on mismatch the output, all these University graduates who are wayside pockets etc. What about this? Well I will put my ideas down and maybe you find this very challenging. I think if you - your education system is relevant, you are teaching irrelevant things and effective, then you can expect that most of your graduates to be taken up, the demand will be there. Certainly in the Asean countries or you could expect that Cyril's Law will operate. If you are Economists, I am sure you will know what Cyril's Law is, which is supply creates demand. Here in America, when they set up the Landra colleges all through middle West where thousands of Aseanites are today. These farmers' sons, they go into Universities never come back, they set up these Universities, richly endowed, and they raised the standard of farming. They increased productivity. They could bring in new technology because the people are better educated and the graduates of Universities created jobs for themselves and in the process they raise the standard. The same thing has happened in much of Australia also. A large number of graduates has contributed to economic development. This is also the Taiwan experience, not the Japanese experience. The Japanese has a totally different attitude towards Universities' graduates. But if your education system is rather expolity, then you won't have a problem of unemployed or underemployed or disguised unemployed graduates. That is



my very piece of statement that I can make to you. I think that is about as far as I can carry, given our time constraint. I greatly enjoyed preparing this lecture and I hope it has been of some use to you and after this, for any length of time, I am prepared to answer questions. Thank you.

UAA/tmn.

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